

Remarks

The Applicants have amended Claim 15 to add another step subsequent to winding. In particular, Claim 15 now recites the step of subjecting the multi-filament yarn to a twisting treatment such that the multi-filament yarn has a twist coefficient of 10,000 to 20,000. Support may be found in the Applicants' specification such as on page 9, line 30. Entry of the above amendment to Claim 15 into the official file is respectfully requested.

All of the claims stand rejected under 35 USC §103 over the combination of Rowan, Toshio and Palmer, along with Negishi, combined with Fujimoto. The Applicants note with appreciation the Examiners' detailed comments applying that combination against the claims. The Applicants nonetheless respectfully submit that the combination fails to disclose, teach or suggest the Applicants' method. Reasons are set forth below.

As noted above, Claim 15 recites the step of subjecting the multi-filament yarn to a twisting treatment such that the multi-filament yarn has a twist coefficient of 10,000 to 20,000. The Applicants have discovered that such a twisting treatment that results in a twist coefficient of 10,000 to 20,000 has an incredible effect on the stretch properties of the resulting multi-filament yarn. Such a twist coefficient allows the resulting woven fabric employing the yarn to have a stretch percentage of about 15% to about 30%, which is highly advantageous.

The Applicants respectfully submit that this unexpected phenomenon is not disclosed, taught or suggested in any of Fujimoto, Rowan, Toshio, Palmer and Negishi. In that regard, a careful review of Fujimoto reveals that there is a brief mention of textured yarns on page 9 in paragraph [0045]. In particular Fujimoto states that:

There is no specific limitation on the form of the fiber; the fiber may be as-drawn flat yarn, a twisted yarn, a textured yarn, or the like.

However, it is clear that this disclosure is merely incidental and provides no teachings or suggestions to those skilled in the art with respect to improving stretch properties. In fact, there is simply no discussion of such stretch properties and surely there is no linkage to subjecting a multi-filament yarn to a twist treatment. It therefore follows that Fujimoto inherently fails to disclose, teach or suggest having the multi-filament yarn having a twist coefficient of 10,000 to 20,000.

Importantly, this lack of disclosure means that there is simply no guidance or no incentive for one to “optimize” a twist coefficient. This is because there is simply no linkage in Fujimoto between twisted yarns and twist coefficients and their resulting impact on stretchability. One skilled in the art simply would not know what to optimize in attempting to improve stretch ability. The Applicants therefore respectfully submit that Fujimoto is actually nonenabling as prior art with respect to this claimed step as recited in Claim 15 because the disclosure of Fujimoto is so completely devoid of discussion with respect to stretchability, twisting treatments and twist coefficient. Hence, Fujimoto is inapplicable.

The Applicants respectfully submit that none of Rowan, Toshio, Palmer and Negishi provide disclosure, teachings or suggestions that would cure the deficiencies as set forth above with respect to Fujimoto. In other words, they too lack teachings with respect to improving stretchability and the unexpected results with respect to having a twist coefficient of 10,000 to 20,000 as claimed. Thus, even if one skilled in the art were to hypothetically combine any or all of Rowan, Toshio, Palmer and Negishi with Fujimoto, the collective teachings would still fail to disclose, teach or suggest the Applicants’ claimed step of subjecting the multi-filament yarn to a twisting treatment such that the multi-filament yarn has a twist coefficient of 10,000 to 20,000. The Applicants therefore respectfully submit that the combination is inapplicable to the solicit claims. Withdrawal of the rejection is accordingly respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'TDC', written over a horizontal line.

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